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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,549	10/18/2000	Stephen S. Jackson	2204/A61	3794

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BROMBERG & SUNSTEIN LLP  
125 SUMMER STREET  
BOSTON, MA 02110-1618

EXAMINER

DINH, MINH

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/691,549

**Applicant(s)**

JACKSON, STEPHEN S.

**Examiner**

Minh Dinh

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

1. Claims 1-29 have been examined.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference numeral 406 (fig. 4). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

3. Claim 7 is objected to because of the following informalities: the preamble is grammatically incorrect. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 6, 13-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stallings ("Cryptography And Network Security") in view of Lehr et al. (6,643,566).

a. Regarding claim 1, which is representative of claims 13-14, Stallings discloses a firewall for use with a network (fig. 16.1 a). Stallings does not disclose that the firewall comprises an input module that receives data addressed to a given computer system in the network, and a security module analyzing the data received by the input module to determine if the data can be forwarded to the given computer system. However, these features are deemed to be inherent to the Stallings firewall since the firewall is configured to filter packets going in both directions (page 520, last paragraph). The Stallings firewall would be inoperative if it did not comprise an input module and a security module.

Stallings does not disclose that the network is a power integrated network and that the firewall comprises a power module receiving power from the power integrated network. Lehr discloses a power integrated network (fig. 2A) and power-over-LAN network devices having power modules receiving power from the power integrated network (fig. 2A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Stallings firewall such that it is used in a power integrated network and it comprises a power module receiving power from the power integrated network, as taught by Lehr. The motivation for doing so would have been to both simplify and reduce the cost of network element installation and provide a

means of supplying uninterrupted or backup power to critical network devices in the event of a power failure (col. 3, lines 13-18).

b. Regarding claims 3 and 15, Lehr further discloses that the power module includes a power converter that converts power received from the power integrated network into a power level that can be used by the network device (col. 11, lines 62-65; col. 12, lines 39-43).

c. Regarding claim 4, Stallings does not disclose that the firewall comprises an output module for forwarding the data to the given computer system. However, this feature is deemed to be inherent to the Stallings firewall since the firewall is configured to filter packets going in both directions (page 520, last paragraph). The Stallings firewall would be inoperative if it did not comprise an output module for forwarding the data to the given computer system.

d. Regarding claims 6 and 18, Lehr further discloses that the power integrated network includes two computer systems coupled by a cable that transmits both data and power (fig. 2A).

6. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stallings in view of Lehr as applied to claims 1 and 14 above, and further in view of "Siemens and PowerDsine enter strategic collaboration to deliver benefits promised by powered-Ethernet telephony concept". Stallings and Lehr do not disclose that the power integrated network implements principles of Power Ethernet. The "Siemens and PowerDsine" reference teaches a power integrated network implementing principles of

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Power Ethernet (page 1, last paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the firewall of Stallings and Lehr such that the power integrated network implements principles of Power Ethernet, as taught in the "Siemens and PowerDsine" reference, to reduce a corporation's installation and maintenance costs.

7. Claim 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stallings in view of Lehr as applied to claims 1 and 14 above, and further in view of Putzolu (6,578,076). Stallings and Lehr do not disclose that the firewall comprises a policy server interface coupled with the security module, the policy server interface communicating policy data with a policy server. Putzolu discloses a firewall comprise a policy server interface coupled with the security module, the policy server interface communicating policy data with a policy server (col. 3, lines 29-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the firewall of Stallings and Lehr such that it comprises a policy server interface coupled with the security module, the policy server interface communicating policy data with a policy server, as taught by Putzolu, so that the policy server is capable of managing a plurality of clients with potentially-diverse policy criteria (col. 3, lines 41-45).

8. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehr in view of Stallings as taught by Fackler et al. (5,729,204).

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a. Regarding claim 7, Lehr discloses a computer cable for communications between a first computer system and a second computer system in a power integrated network, the cable comprising:

a data channel for transmitting data between the first computer system and the second computer system (col. 9, lines 41-47);

a power channel for transmitting power between the first computer system and the second computer system (col. 9, lines 41-47).

Lehr does not disclose a firewall coupled with the data channel and the power channel, the firewall being energized by power received from the power channel. Fackler discloses an intelligent cable comprising a device for controlling data flow between devices (see Abstract and fig. 2). Stallings discloses a firewall for controlling data flow between network devices (fig. 16.1 a). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cable of Lehr such that it comprises the firewall of Stallings, as taught by Fackler, and accordingly, the firewall coupled with the data channel and the power channel, the firewall being energized by power received from the power channel. The motivation for doing so would have been to provide a cable that controls data flow between devices and is relatively compact and relatively low cost (col. 1, lines 60-64).

b. Regarding claim 8, Lehr further discloses that for bi-directional communication, the data channel includes at least one data wire (col. 4, lines 15-18).

c. Regarding claim 9, Lehr further discloses that the power channel includes at least one power wire (col. 4, lines 9-11).

d. Regarding claim 10, Lehr does not disclose that the cable comprises a power converter. Fackler discloses that the cable comprises a voltage regulator, which meets the limitation of a power converter (col. 8, lines 57-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cable of Lehr such that it comprises power converter, as taught by Fackler, in order to protect the controllers from unwanted electrical noise and over-voltages.

e. Regarding claim 11, Lehr further discloses that the cable further comprises a first coupler for coupling the first computer system with one end of the computer cable; and a second coupler for coupling the second computer system with the other end of the computer cable (fig. 2A).

f. Regarding claim 12, Lehr further discloses that the cable comprises a containment layer circumscribing the data channel and the power channel (col. 4, lines 9-15). Lehr does not disclose a containment layer circumscribing the firewall; however, this feature is deemed to be inherent to the Lehr cable, because two out of the three components of the cable, the data channel and the power channel, have been insulated.

9. Claims 19, 21-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimbo et al. (6,185,680) in view of Lehr.

a. Regarding claims 19, which is representative of claim 25, Shimbo discloses a network coupled with a specific network, the network comprising:

a plurality of computer systems (fig. 1, element 102);



a network firewall coupled between the network and the specific network (fig. 1, element 102);

a local firewall coupled to a computer system, the local firewall preventing unauthorized access to the computer system (fig. 1, element 102).

Shimbo does not disclose that the network is a power integrated network and that the local firewall is powered by the power integrated network. Lehr disclose a power integrated network and devices in the network are powered by the power integrated network (fig. 2A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Shimbo network such that it is a power integrated network and that the local firewall is powered by the power integrated network, as taught by Lehr. The motivation for doing so would have been to both simplify and reduce the cost of network element installation and provide a means of supplying uninterrupted or backup power to critical network devices in the event of a power failure (col. 3, lines 13-18).

- b. Claim 21 is rejected on the same basis as claim 19.
- c. Regarding claims 22 and 26, Lehr further discloses that the power integrated network includes two computers coupled by a cable that transmits both data and power (fig. 2A).
- d. Regarding claims 24 and 27, Shimbo further discloses that the specific network includes a public network (fig. 1).

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10. Claims 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimbo in view of Lehr as applied to claims 19 and 25 above, and further in view of Putzolu. Shimbo and Lehr do not disclose that the power integrated network comprises a policy server coupled with the local firewall. Putzolu discloses a policy server coupled with a firewall (col. 3, lines 29-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the network of Shimbo and Lehr such that it comprises a policy server coupled with the local firewall, as taught by Putzolu, so that the policy server is capable of managing a plurality of clients with potentially-diverse policy criteria (col. 3, lines 41-45).

11. Claims 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimbo in view of Lehr as applied to claims 19 and 25, and further in view of "Siemens and PowerDsine". Shimbo and Lehr do not disclose that the power integrated network implements principles of Power Ethernet. The "Siemens and PowerDsine" reference teaches a power integrated network implementing principles of Power Ethernet (page 1, last paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the firewall of Shimbo and Lehr such that the power integrated network implements principles of Power Ethernet, as taught in the "Siemens and PowerDsine" reference, to reduce a corporation's installation and maintenance costs.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sutterlin et al. (5,148,144) disclose a data communications network for delivering power and communications over the same cable.

Segal (6,345,299) discloses a distributed security system for a communication network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 703-306-5617. The examiner can normally be reached on Mon - Fri: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

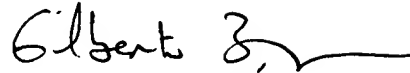
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A handwritten signature in black ink, appearing to read "Gilberto Barron", with a stylized flourish extending to the right.

GILBERTO BARRON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100